I 49.89:82/47-1/MAP
A 8

BAINBRIDGE,FLORIDA ECOLOGICAL ATLAS,
BIOLOGICAL RESOURCES. . . FWS/OBS-82/47.1,
MAP A8. . . UNITED STATES DEPARTMENT OF
THE INTERIOR. . . 1984

1 OF 1
12.5X
SUPTDOCS/GPO
MAP A8

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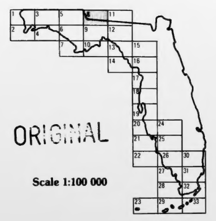
MMS 85-0011
FWS/OBS-82/47.1

MAP A8

Bainbridge

FLORIDA ECOLOGICAL ATLAS

BIOLOGICAL RESOURCES



ORIGINAL

Scale 1:100 000

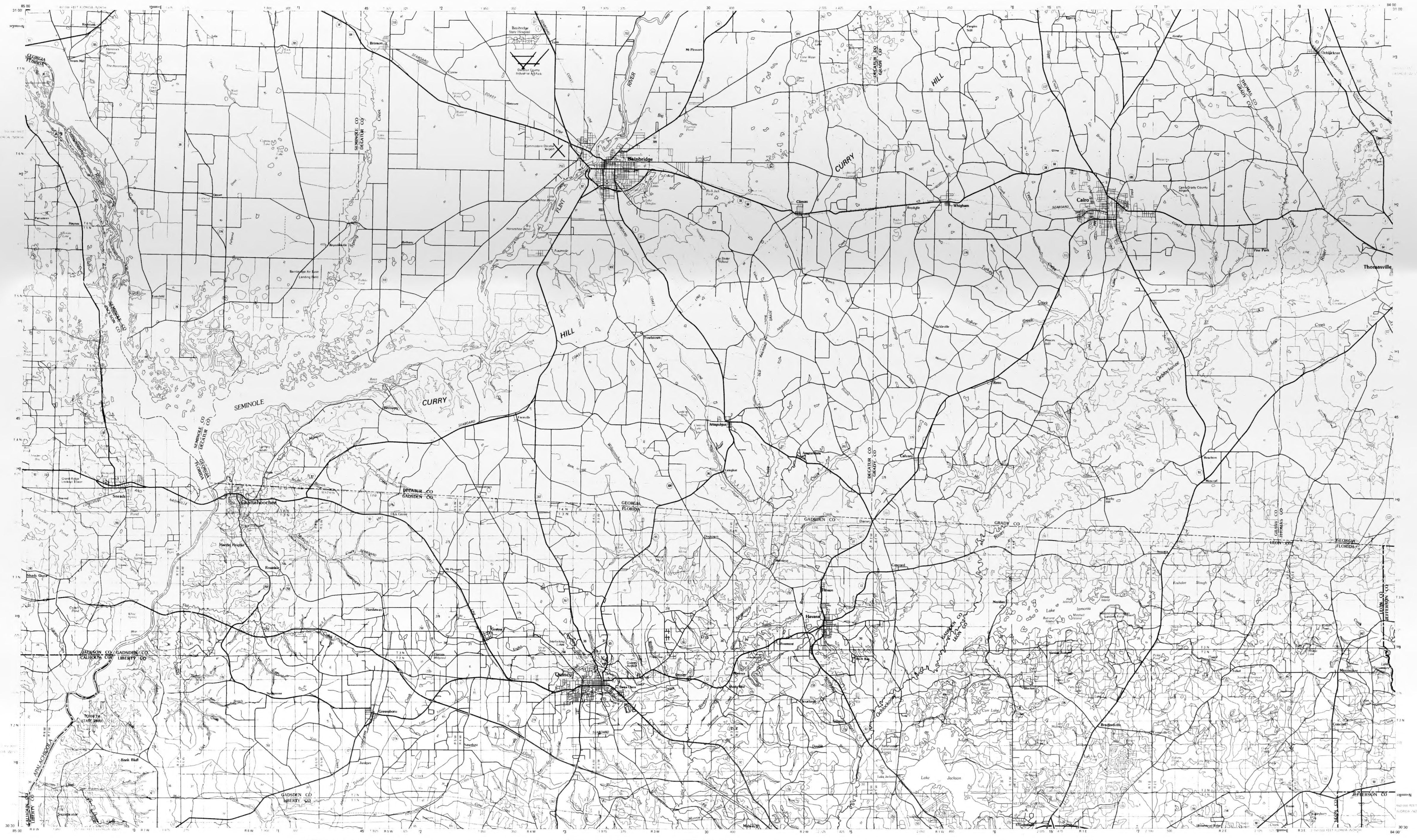
TOPICAL MAPS IN THIS ATLAS:
- A. BIOLOGICAL RESOURCES
- B. SOCIOECONOMIC FEATURES
- C. SOILS AND LANDFORMS
- D. OIL, GAS AND MINERALS
- E. HYDROLOGY AND CLIMATOLOGY

1984

Produced by U.S. Fish and Wildlife Service and Minerals Management Service

Projection and 10,000 meter grid, zone 17: Universal Transverse Mercator
25,000-foot grid ticks based on Florida coordinate system, west zone

Overlay material compiled in 1983 from latest available data obtained from Federal State and Local government agencies and other sources.



SCALE 1:100 000
1 CENTIMETER ON THE MAP REPRESENTS 1 KILOMETER ON THE GROUND
CONTOUR INTERVAL 5 METERS

MAJOR HABITATS
- ☐ Estuarine (saltwater) Tidal Marsh
- ☐ Estuarine Scrub/Shrub (Mangrove)
- ☐ Palustrine (freshwater) Marsh
- ☐ Palustrine Forest
- ☐ Seagrass Bed

■ ARTIFICIAL REEF
(Permitted by Florida Dept. of Environmental Regulation)
Numbers next to reefs refer to composition data in narrative. Reef shapes vary on map.

SHELLFISH HARVEST AREA
(Florida Dept. of Natural Resources)

SHA Shellfish Harvest Approved

SHCA Shellfish Harvest Conditionally Approved

NOTE: Due to Dept. of Natural Resources (DNR) water quality standards all other estuarine areas are prohibited or unclassified as to shellfish harvest status and are officially unapproved. For further info. on status of harvest areas contact DNR - Shellfish Environmental Assessment Section.

(Oys-1) Public Oyster Bed

Oys-2 Private Oyster Bed (Lease)

● Scallop Bed

FINFISH SPAWNING, NURSERY AND HARVEST AREAS
(Recreational Hook and Line Fishing)

SPECIES #	FINFISH CATEGORY Common Name	SPAWNING LOCATION[1]	SPAWNING SEASON J M M J S N	NURSERY AREA[1]	MAJOR NURSERY HABITATS Seagrass	Mangrove	Saltmarsh	Beach	Coral Reef	Artificial Reef	Open Water	AREA OF ADULT ABUNDANCE[1]	MAJOR ADULT HABITATS Seagrass	Mangrove	Beach	Coral Reef	Artificial Reef	Open Water	MIGRATION TYPE[2]
	ESTUARINE DEPENDENT FISHES																		
1	Red Drum	C		E	●	●	●					E	●	●	●				2
2	Spotted Seatrout	E		E	●	●	●					E	●	●	●				2
3	Snook	C		E	●	●	●					E	●	●					2
4	Atlantic Croaker	CS		E	●	●	●	●				E	●	●	●				2
5	Southern Flounder	C		C-E	●		●	●				C-E	●		●				2
6	Florida Pompano	CS		C-E				●				C-E			●			●	3
7	Striped Mullet	CS		E	●	●	●					E	●	●	●				3
8	Gulf Menhaden	C		E	●	●	●	●				C-E	●		●			●	3
9	Scaled Sardine	C		E	●	●	●	●				C-E	●		●			●	3
	REEF FISHES																		
10	Red Grouper	CS		CS-C	●				●	●		CS				●	●		2
11	Jewfish	CS		CS-C	●				●	●		CS-C				●	●		2
12	Gag Grouper	CS		CS-C	●				●	●		CS-C				●	●		2
13	Scamp	CS		CS	●				●	●		CS				●	●		2
14	Red Snapper	CS		CS-C					●	●		CS-C				●	●		2
15	Mangrove Snapper	CS		C-E	●	●	●					C-E				●	●		2
	COASTAL PELAGIC FISHES																		
16	King Mackerel	OCS		CS							●	CS-C				●	●	●	4
17	Spanish Mackerel	CS		CS							●	CS-C				●	●	●	4

[1] KEY:
E — Estuarine
C — Coastal
CS — Continental Shelf
OCS — Outer Continental Shelf

[2] MIGRATION TYPE:
1 — Residentially Restricted
2 — Random Residential Range
3 — Restricted Migration
4 — Extensive Migration

STUDY AREA BOUNDARY
- ▪▪▪▪▪▪▪▪ Offshore
- — — — Inland (County)
- — - — Inland (State)

THE FLORIDA ECOLOGICAL ATLAS WAS PRODUCED BY THE U.S. FISH AND WILDLIFE SERVICE, DIVISION OF BIOLOGICAL SERVICES, NATIONAL COASTAL ECOSYSTEMS TEAM (FWS/OBS - 82/47) AND THE MINERALS MANAGEMENT SERVICE FOR COASTAL PLANNERS, DECISION MAKERS, AND THE GENERAL PUBLIC, TO DETERMINE AND EVALUATE CHANGE AND TO RESOLVE CONFLICTS AMONG LAND USES, FISH AND WILDLIFE REQUIREMENTS, AND THE MAINTENANCE OF ECOLOGICAL DIVERSITY. THE STUDY AREA INCLUDES THE COASTAL COUNTIES: ESCAMBIA, SANTA ROSA, OKALOOSA, WALTON, WASHINGTON, BAY, CALHOUN, GULF, FRANKLIN, WAKULLA, JEFFERSON, TAYLOR, DIXIE, LEVY, CITRUS AND HERNANDO, AND EXTENDS OFFSHORE APPROXIMATELY 10 MILES. THERE IS NO ATTEMPT, IN THE DESIGN OR PRODUCTS OF THIS STUDY, TO DEFINE THE LIMITS OF PROPRIETARY JURISDICTION OF ANY FEDERAL, STATE, OR LOCAL GOVERNMENT TO ESTABLISH THE GEOGRAPHICAL SCOPE OF THE REGULATORY PROGRAMS OF GOVERNMENT AGENCIES.

THIS MAP HAS BEEN COMPILED FROM A VARIETY OF SOURCE MATERIALS INCLUDING MAPS, AERIAL PHOTOS, AND REPORTS. SINCE MANY SOURCES CONTAINED GENERALIZED LOCATIONS OF RESOURCES AND OTHER MAPPED FEATURES, THE USER SHOULD NOT RELY ON THESE MAPS FOR PRECISE MEASUREMENTS OF DISTANCES OR AREAS.

PRIMARY SOURCES OF MAPPED INFORMATION:

MAJOR HABITATS: National Wetlands Inventory Maps, 1:250,000 Scale. U.S. Fish and Wildlife Service, 1981-82.

SEAGRASS BEDS: Personal Communication, Dr. John L. Taylor, Taylor Biological Co., Inc., Lynn Haven, Fla. 1983.
National Wetlands Inventory Maps, 1:250,000 Scale, U.S. Fish and Wildlife Service, 1981-82.
Marine Grass Beds Inventory, North Florida Coast, U.S. Fish and Wildlife Service, 1981.
Color Aerial Photography (NASA), 1:65,000 Scale, located at U.S.F.W.S. Ecological Services Division, Panama City, Fla. 1980.

ARTIFICIAL REEFS: Computer Printout of Florida Artificial Reefs. U.S. Army Corps of Engineers, 1981.
Recreational Use Reefs in Florida Artificial and Natural, Florida Sea Grant Program, 1979.

SHELLFISH HARVEST AREAS: Shellfish Harvest Area Maps. Dept of Natural Resources, 1982.

PUBLIC & PRIVATE OYSTER BEDS: Cooperative Gulf of Mexico Estuarine Inventory and Study, Florida, McNulty, Lindall and Sykes, 1972.

SCALLOP BEDS: Personal Communication, Mr. Bill Lyons, Dept. of Natural Resources, Marine Research Laboratory, 1982.

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SENSITIVE PLANT SPECIES: Computer Printout of Species Data, Florida Natural Areas Inventory, 1983.
Personal Communication, Maps and Data, Mr. Don Palmer, Endangered Species Program, U.S. Fish and Wildlife Service, 1982.

BIRD NESTING SITES: Florida Atlas of Breeding Sites for Herons and Their Allies 1976-78, Nesbitt, S.A., Ogden, J.C., Kale II, H.W., et al., U.S. Fish and Wildlife Service, 1982.
Personal Communication, Maps and Data, Dr. H.W. Kale II, Florida Audubon Society, 1982.

THREATENED & ENDANGERED ANIMALS: Computer Printout of Species Data, Florida Natural Areas Inventory, 1983.
Personal Communication, Mr. Don Wood, Fla. Game and Fresh Water Fish Commission, 1983.
Summary of Marine Turtle Activity in Florida, Huff, A.J., Witham, P.R., Haag, J.L., et al., Dept. of Natural Resources, 1981 (Unpublished).
Status of Florida Nesting Brown Pelicans 1971-76, Nesbitt, S.A., Fogarty, M.J. and Williams, L.E., Fla. Game and Fresh Water Fish Commission, 1977.

SENSITIVE HABITAT: Personal Communication, Maps and Data, Mr. Steve Nesbitt, Fla. Game and Fresh Water Fish Commission, 1983.

FOR COMPLETE REFERENCES SEE MAP NARRATIVE

SENSITIVE PLANT SPECIES
(U.S. Fish and Wildlife Service and Florida Natural Areas Inventory data)
Number(s) appearing with symbol refers to species identification number in legend.

Species #	Common Name	Status [1]Federal	Status [2]State
1.	Southern three-awned grass	1	
2.	Plumose aster	1	
3.	Pine-wood aster	1	
4.	Scare weed	1	
5.	Cruise's golden aster	1	
6.	Tropical wax-weed	1	
7.	Telephus spurge	1	
8.	Wiregrass gentian	1	
9.	Harper's beauty	E	
10.	Mock pennyroyal	1	
11.	Bent golden aster	1	
12.	Smooth-barked St. John's wort	1	
13.	Godfrey's blazing star	1	
14.	Panhandle lily	1	
15.	West's flax	1	
16.	White birds-in-a-nest	1	
17.	Ashe's magnolia	1	e
18.	Godfrey's sandwort	1	
19.	Pigmy-pipes	1	
20.	Florida beargrass	1	
21.	Giant water-dropwort	1	
22.	Butterwort	1	
23.	Large-leaved jointweed	1	
24.	Chapman's rhododendron	E	e
25.	Miccosukee gooseberry	1	e
26.	Florida skullcap	1	
27.	Tampa vervain	1	

NOTE: These species are listed as category UR-1 by the U.S.F.W.S. and as such are considered candidates for listing as threatened or endangered.

[1] United States Fish and Wildlife Service: 1 - under status review. Category 1 (sufficient information available to support listing as Endangered or Threatened)

[2] Florida Dept. of Agriculture and Consumer Services (FDACS): e — endangered; t — threatened.

COLONIAL BIRD NESTING SITE
Number appearing with symbol indicates colony sites. Colony sites and species - composition data are included in the narrative.
- Shorebird
- Wading Bird
- Brown Pelican

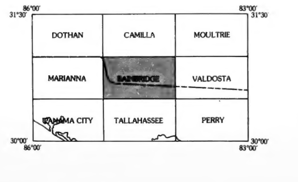
THREATENED AND ENDANGERED ANIMALS
Status: T — Federally Listed Threatened (U.S.F.W.S.)
E — Federally Listed Endangered (U.S.F.W.S.)
t — State Listed Threatened (F.G.F.W.F.C.)
e — State Listed Endangered (F.G.F.W.F.C.)

U.S.F.W.S. — U.S. Fish and Wildlife Service
F.G.F.W.F.C. — Florida Game and Fresh Water Fish Commission

Animal	Status
West Indian Manatee (Mapped on site-specific basis)	E, e
Brown Pelican (Nesting Colony)	E, t
Red-Cockaded Woodpecker (Mapped on township and range basis)	E, t
Loggerhead Seaturtle (Nesting Beach)	T, t
Okaloosa Darter (Mapped on site-specific basis)	E, e

Other Threatened and Endangered species not mapped, but included in the narrative, are: Florida Panther, Marine Turtles, American Alligator and Eastern Indigo Snake.

○ SENSITIVE HABITAT
May not represent actual location of species at the time of map publication. For details refer to narrative.



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